

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF120319\  
 Data File : BF118075.D  
 Acq On : 3 Dec 2019 21:16  
 Operator : JU  
 Sample : K6024-04  
 Misc :  
 ALS Vial : 18 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 B-4-(0.5-1.0)

Manual Integrations  
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Quant Time: Dec 04 01:24:26 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF111319.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Dec 03 15:16:53 2019  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|-------|------|----------|--------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 6.87  | 152  | 139588   | 20.00  | ng    | 0.00     |
| 21) Naphthalene-d8          | 8.16  | 136  | 546909   | 20.00  | ng    | 0.00     |
| 39) Acenaphthene-d10        | 9.92  | 164  | 294878   | 20.00  | ng    | -0.01    |
| 64) Phenanthrene-d10        | 11.42 | 188  | 550226   | 20.00  | ng    | 0.00     |
| 76) Chrysene-d12            | 14.07 | 240  | 359151   | 20.00  | ng    | 0.00     |
| 87) Perylene-d12            | 15.57 | 264  | 390268   | 20.00  | ng    | 0.00     |
| System Monitoring Compounds |       |      |          |        |       |          |
| 5) 2-Fluorophenol           | 5.49  | 112  | 810536   | 102.78 | ng    | 0.00     |
| 7) Phenol-d6                | 6.50  | 99   | 1023321  | 107.59 | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 7.44  | 82   | 627078   | 68.16  | ng    | 0.00     |
| 42) 2,4,6-Tribromophenol    | 10.72 | 330  | 329386   | 105.51 | ng    | 0.00     |
| 45) 2-Fluorobiphenyl        | 9.24  | 172  | 1098057  | 66.81  | ng    | 0.00     |
| 79) Terphenyl-d14           | 13.01 | 244  | 1168079  | 59.44  | ng    | 0.00     |
| Target Compounds            |       |      |          |        |       |          |
| 50) Dimethylphthalate       | 9.63  | 163  | 219204   | 10.601 | ng    | 99       |
| 71) Phenanthrene            | 11.44 | 178  | 256053   | 9.256  | ng    | 100      |
| 75) Fluoranthene            | 12.64 | 202  | 598852   | 19.510 | ng    | 98       |
| 78) Pyrene                  | 12.87 | 202  | 554681   | 19.110 | ng    | 99       |
| 81) Benzo(a)anthracene      | 14.06 | 228  | 276200   | 11.638 | ng    | 99       |
| 83) Chrysene                | 14.10 | 228  | 250391   | 10.888 | ng    | 99       |
| 86) Indeno(1,2,3-cd)pyrene  | 17.07 | 276  | 153837   | 7.860  | ng    | 95       |
| 88) Benzo(b)fluoranthene    | 15.13 | 252  | 302470m  | 11.929 | ng    |          |
| 89) Benzo(k)fluoranthene    | 15.15 | 252  | 113404m  | 4.747  | ng    |          |
| 90) Benzo(a)pyrene          | 15.50 | 252  | 229923   | 10.312 | ng    | 99       |
| 91) Dibenzo(a,h)anthracene  | 17.08 | 278  | 39590m   | 2.063  | ng    |          |
| 92) Benzo(a,h,i)perylene    | 17.53 | 276  | 142201   | 7.439  | ng    | 98       |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

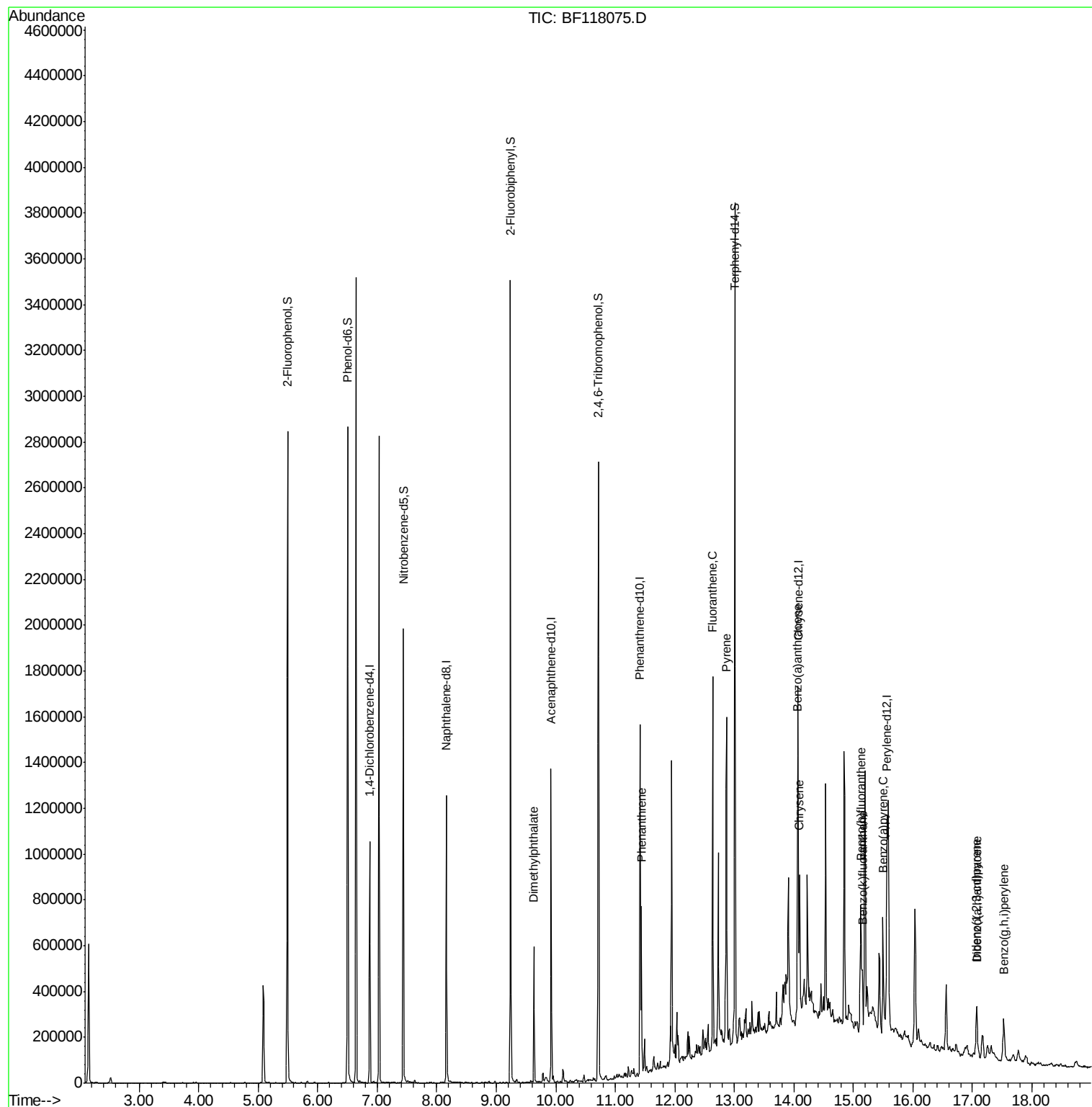
Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF120319\  
Data File : BF118075.D  
Acq On : 3 Dec 2019 21:16  
Operator : JU  
Sample : K6024-04  
Misc :  
ALS Vial : 18 Sample Multiplier: 1

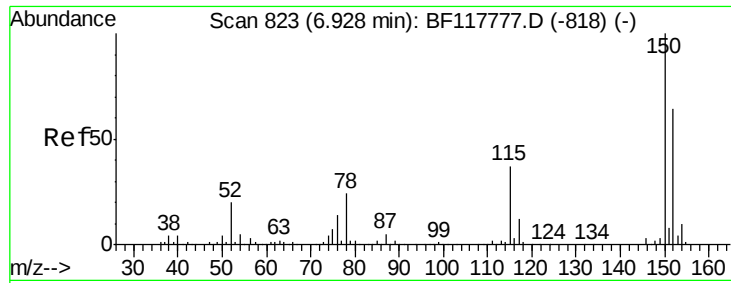
Instrument :  
BNA\_F  
ClientSampled :  
B-4-(0.5-1.0)

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Quant Time: Dec 04 01:24:26 2019  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF111319.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Tue Dec 03 15:16:53 2019  
Response via : Initial Calibration





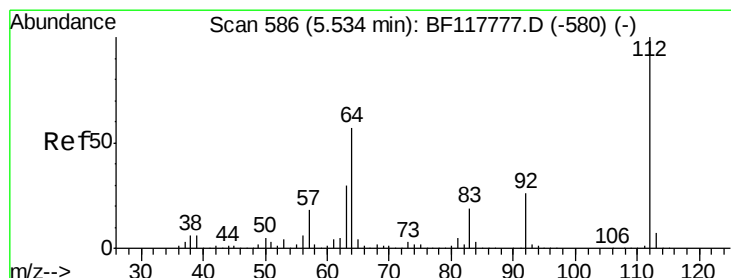
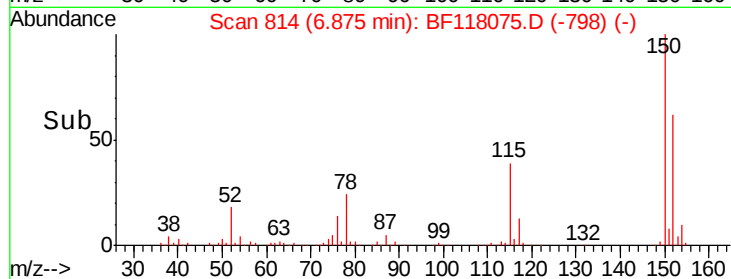
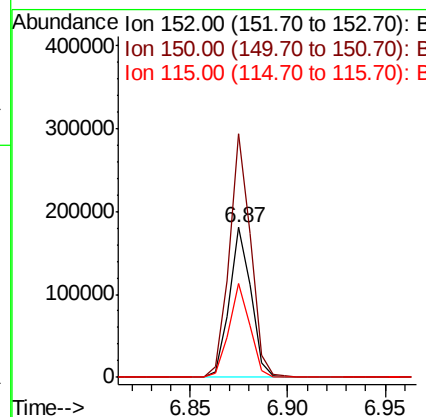
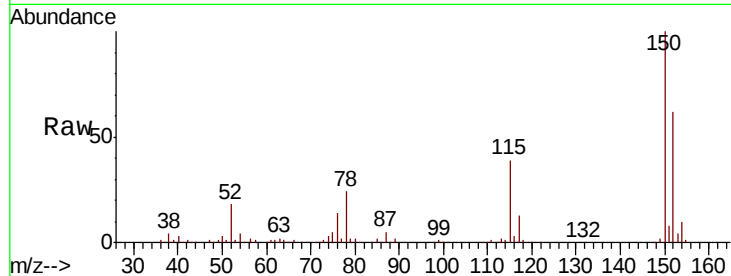
#1  
 1,4-Dichlorobenzene-d4  
 Concen: 20.000 ng  
 RT: 6.87 min Scan# 814  
 Delta R.T. -0.01 min  
 Lab File: BF118075.D  
 Acq: 3 Dec 2019 21:16

Instrument :  
 BNA\_F  
 ClientSampleId :  
 B-4-(0.5-1.0)

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 162.3 | 121.4 | 182.2 |
| 115     | 62.7  | 48.8  | 73.2  |

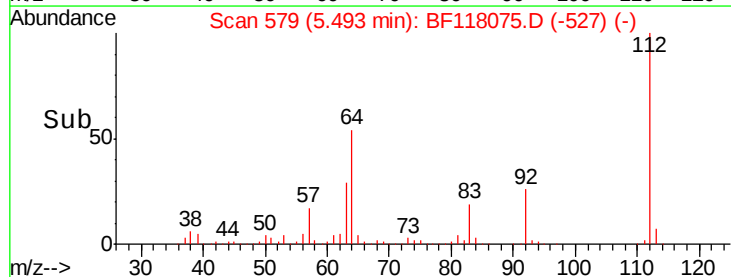
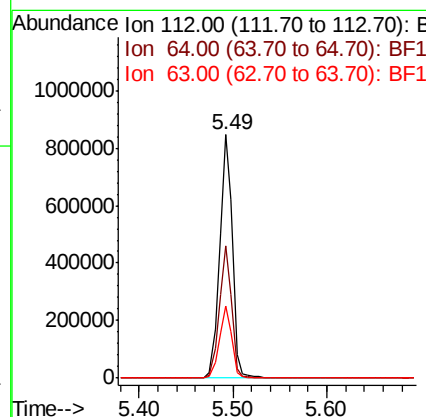
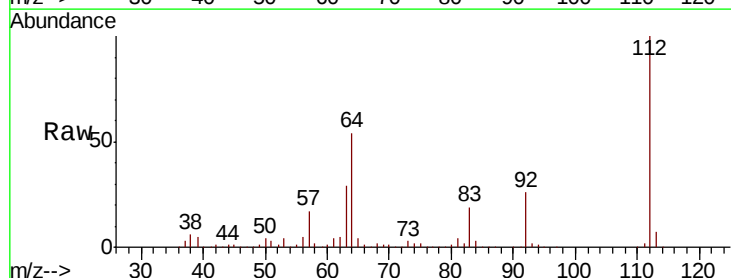
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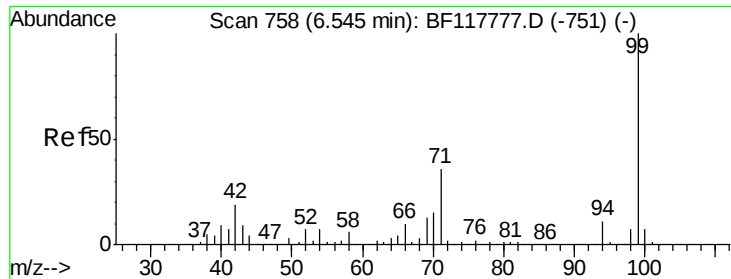
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#5  
 2-Fluorophenol  
 Concen: 102.784 ng  
 RT: 5.49 min Scan# 579  
 Delta R.T. 0.01 min  
 Lab File: BF118075.D  
 Acq: 3 Dec 2019 21:16

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 54.1  | 45.1  | 67.7  |
| 63      | 29.5  | 24.6  | 37.0  |





#7

Phenol-d6

Concen: 107.586 ng

RT: 6.50 min Scan# 751

Delta R.T. -0.01 min

Lab File: BF118075.D

Acq: 3 Dec 2019 21:16

Instrument :

BNA\_F

ClientSampled :

B-4-(0.5-1.0)

Tot Ion: 99 Resp: 1023321

Ion Ratio Lower Upper

99 100

42 17.7 14.0 21.0

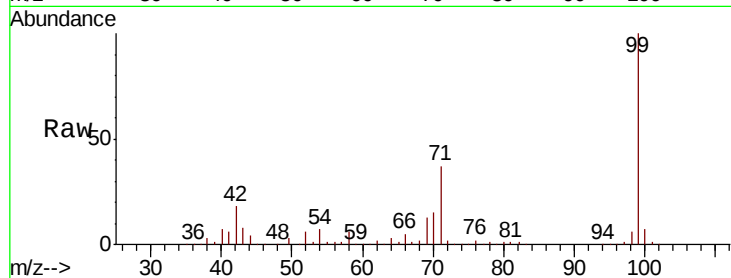
71 37.3 29.2 43.8

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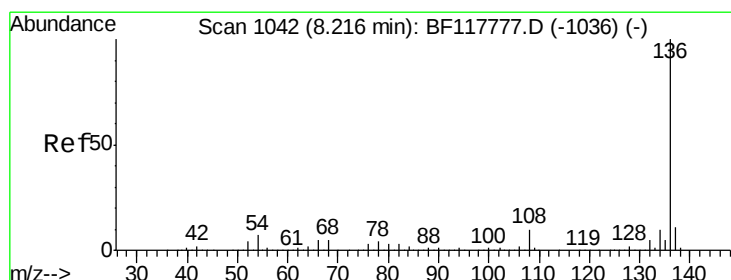
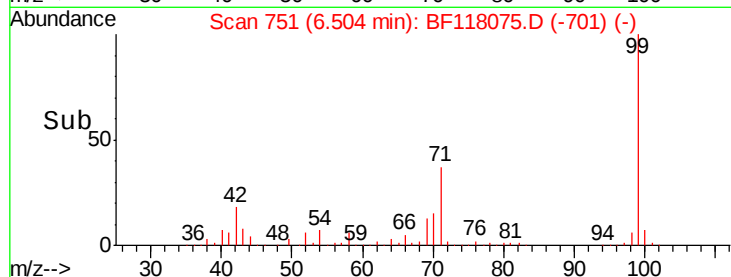
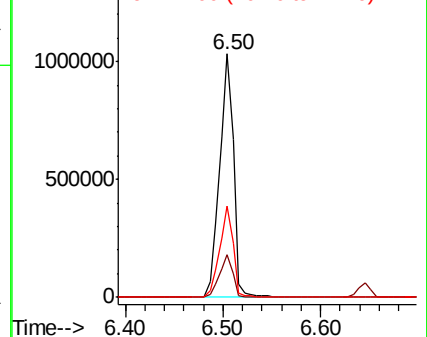
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Abundance Ion 99.00 (98.70 to 99.70): BF1

Ion 42.00 (41.70 to 42.70): BF1

Ion 71.00 (70.70 to 71.70): BF1



#21

Naphthalene-d8

Concen: 20.000 ng

RT: 8.16 min Scan# 1033

Delta R.T. -0.01 min

Lab File: BF118075.D

Acq: 3 Dec 2019 21:16

Tgt Ion: 136 Resp: 546909

Ion Ratio Lower Upper

136 100

137 11.0 9.1 13.7

54 5.9 4.9 7.3

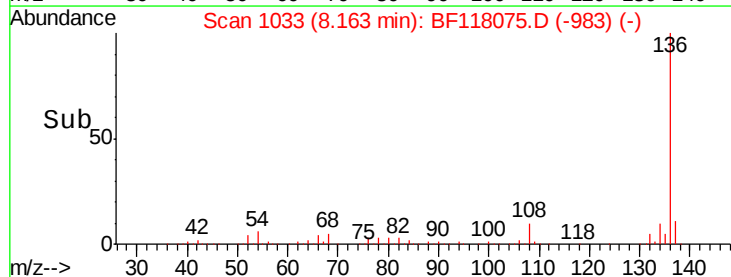
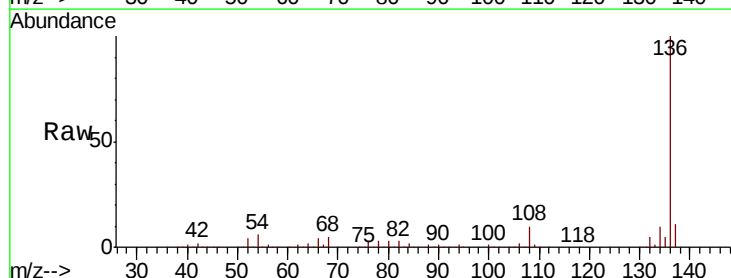
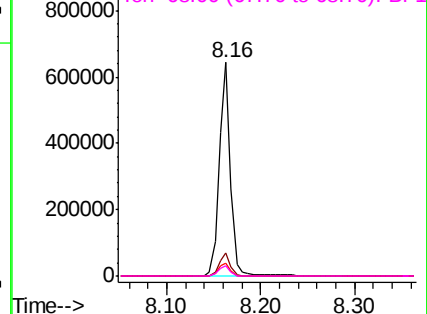
68 4.9 3.6 5.4

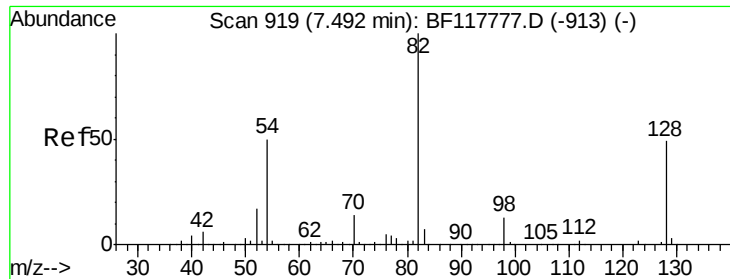
Abundance Ion 136.00 (135.70 to 136.70): E

Ion 137.00 (136.70 to 137.70): E

Ion 54.00 (53.70 to 54.70): BF1

Ion 68.00 (67.70 to 68.70): BF1





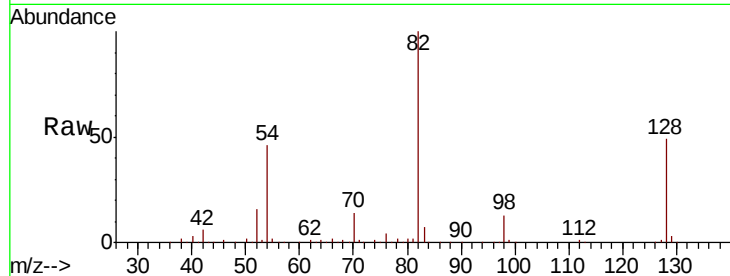
#23  
Nitrobenzene-d5  
Concen: 68.160 ng  
RT: 7.44 min Scan# 910  
Delta R.T. -0.01 min  
Lab File: BF118075.D  
Acq: 3 Dec 2019 21:16

Instrument :  
BNA\_F  
ClientSampled :  
B-4-(0.5-1.0)

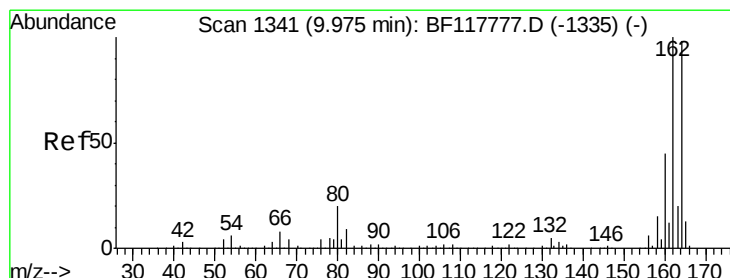
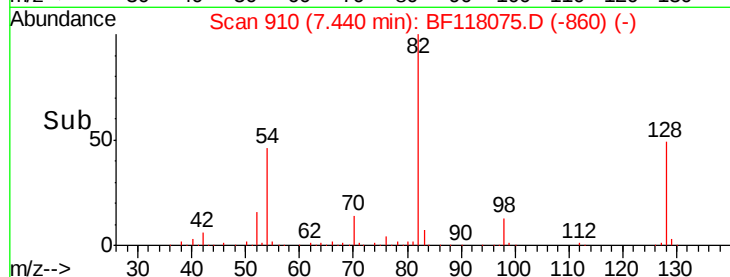
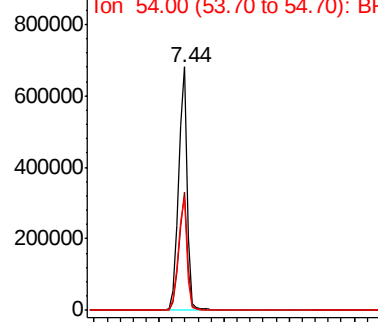
| Tot Ion   | 82   | Resp  | 627078 |
|-----------|------|-------|--------|
| Ion Ratio | 100  | Lower | Upper  |
| 82        | 100  |       |        |
| 128       | 48.5 | 38.2  | 57.4   |
| 54        | 46.3 | 39.0  | 58.4   |

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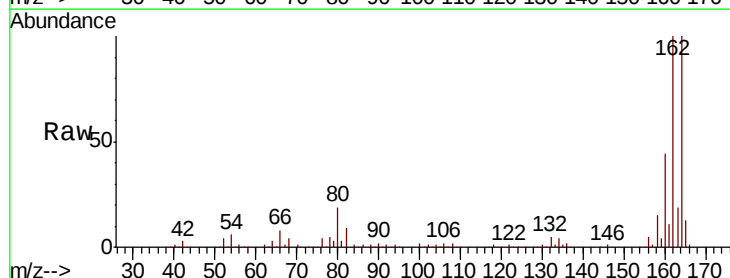


Abundance Ion 82.00 (81.70 to 82.70): BF1  
Ion 128.00 (127.70 to 128.70): E  
Ion 54.00 (53.70 to 54.70): BF1

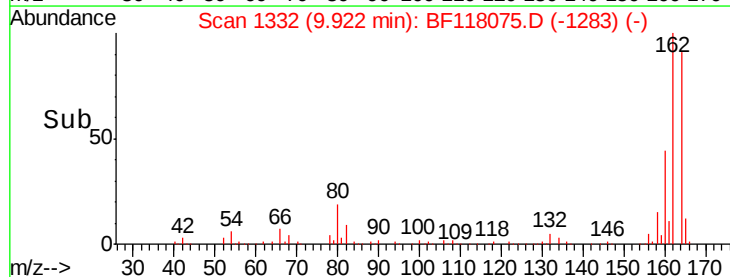
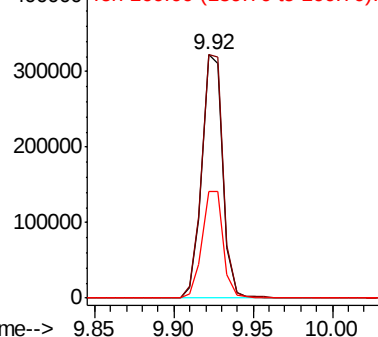


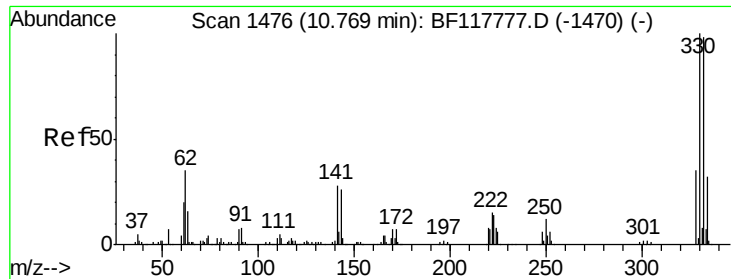
#39  
Acenaphthene-d10  
Concen: 20.000 ng  
RT: 9.92 min Scan# 1332  
Delta R.T. -0.01 min  
Lab File: BF118075.D  
Acq: 3 Dec 2019 21:16

| Tgt Ion   | 164  | Resp  | 294878 |
|-----------|------|-------|--------|
| Ion Ratio | 100  | Lower | Upper  |
| 164       | 100  |       |        |
| 162       | 99.9 | 81.8  | 122.8  |
| 160       | 43.6 | 35.9  | 53.9   |



Abundance Ion 164.00 (163.70 to 164.70): E  
Ion 162.00 (161.70 to 162.70): E  
Ion 160.00 (159.70 to 160.70): E





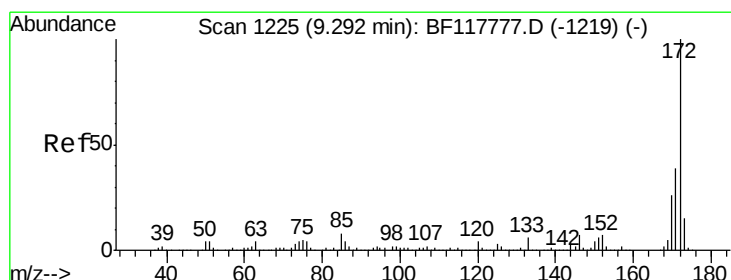
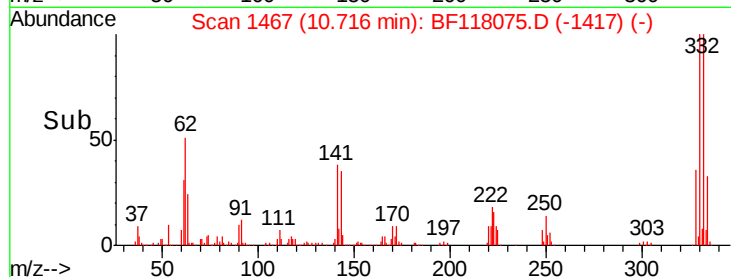
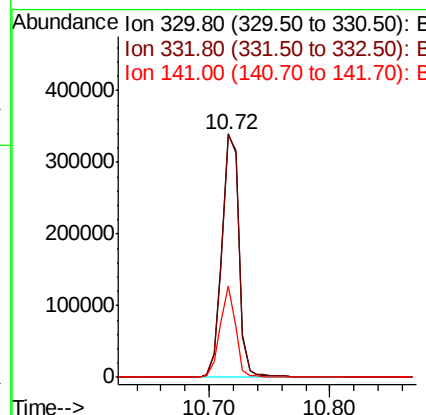
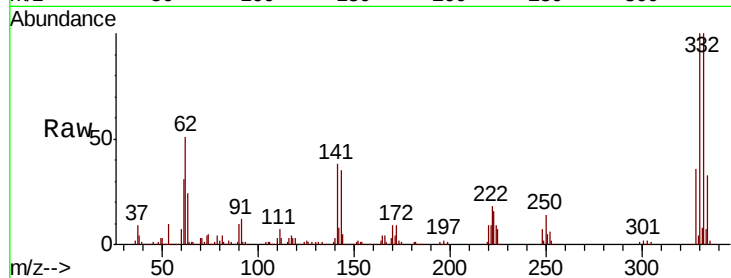
#42  
 2,4,6-Tribromophenol  
 Concen: 105.510 ng  
 RT: 10.72 min Scan# 1467  
 Delta R.T. -0.01 min  
 Lab File: BF118075.D  
 Acq: 3 Dec 2019 21:16

Instrument :  
 BNA\_F  
 ClientSampleId :  
 B-4-(0.5-1.0)

| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 330     | 100   | 329386 |       |       |
| 332     | 99.0  | 78.3   | 117.5 |       |
| 141     | 34.0  | 26.4   | 39.6  |       |

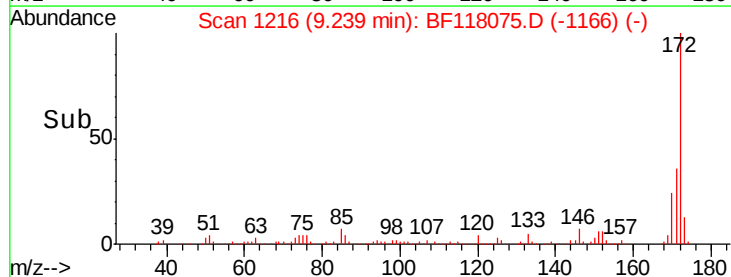
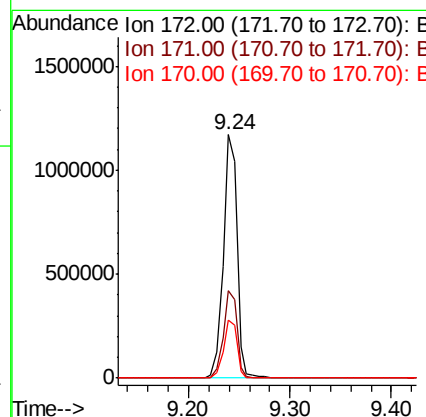
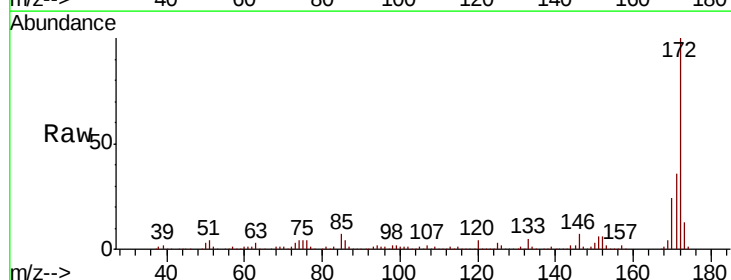
Manual Integrations  
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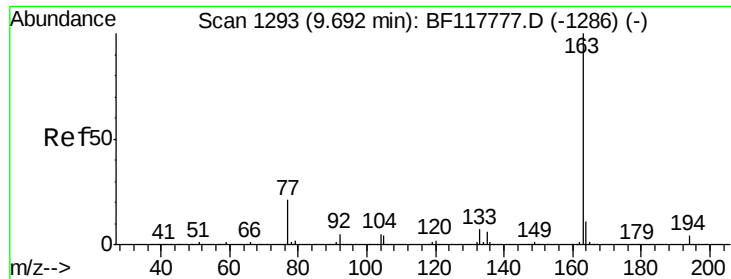
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#45  
 2-Fluorobiphenyl  
 Concen: 66.806 ng  
 RT: 9.24 min Scan# 1216  
 Delta R.T. -0.01 min  
 Lab File: BF118075.D  
 Acq: 3 Dec 2019 21:16

| Tgt Ion | Ratio | Resp    | Lower | Upper |
|---------|-------|---------|-------|-------|
| 172     | 100   | 1098057 |       |       |
| 171     | 35.8  | 29.2    | 43.8  |       |
| 170     | 24.0  | 19.3    | 28.9  |       |





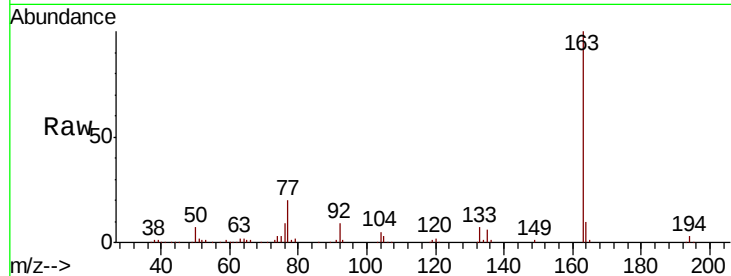
#50  
Dimethylphthalate  
Concen: 10.601 ng  
RT: 9.63 min Scan# 1283  
Delta R.T. -0.02 min  
Lab File: BF118075.D  
Acq: 3 Dec 2019 21:16

Instrument :  
BNA\_F  
ClientSampleId :  
B-4-(0.5-1.0)

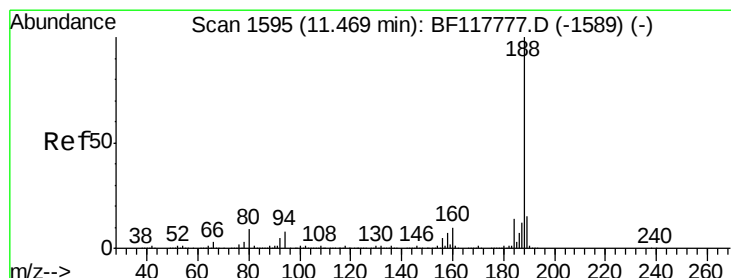
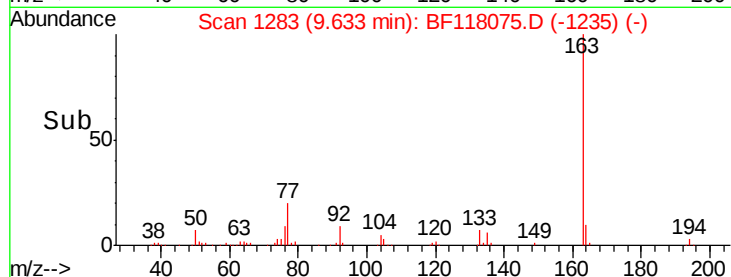
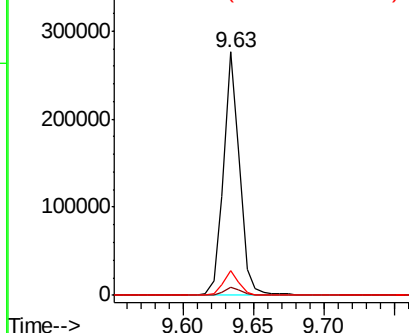
| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 163     | 100   | 219204 |       |       |
| 194     | 3.4   |        | 3.1   | 4.7   |
| 164     | 10.0  |        | 7.9   | 11.9  |

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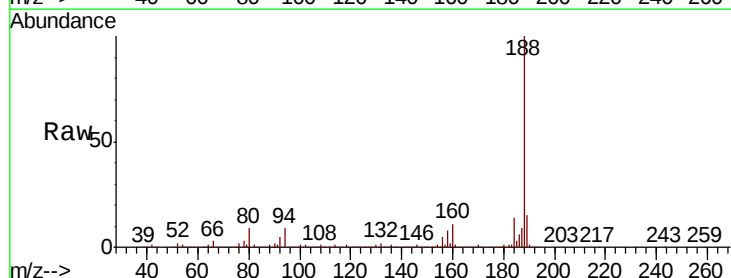


Abundance Ion 163.00 (162.70 to 163.70): E  
Ion 194.00 (193.70 to 194.70): E  
Ion 164.00 (163.70 to 164.70): E

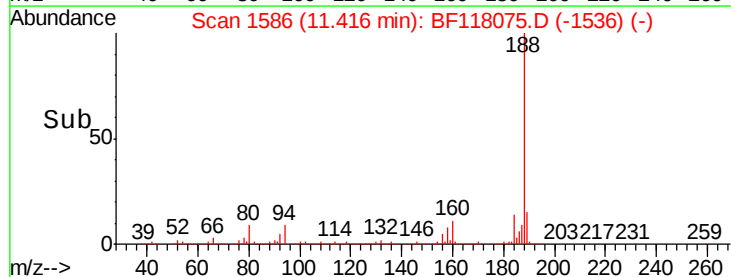
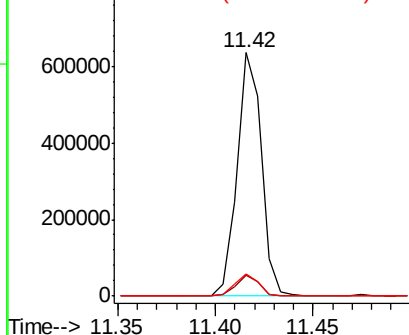


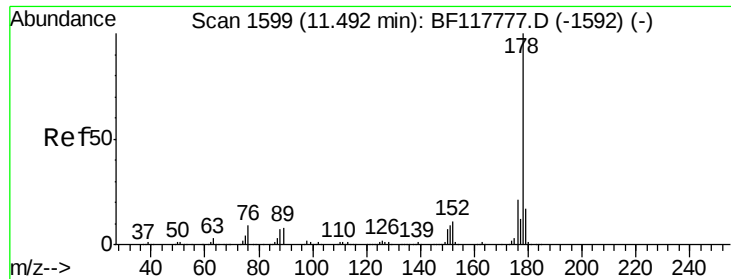
#64  
Phenanthrene-d10  
Concen: 20.000 ng  
RT: 11.42 min Scan# 1586  
Delta R.T. -0.01 min  
Lab File: BF118075.D  
Acq: 3 Dec 2019 21:16

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 188     | 100   | 550226 |       |       |
| 94      | 8.5   |        | 7.0   | 10.6  |
| 80      | 9.3   |        | 7.2   | 10.8  |



Abundance Ion 188.00 (187.70 to 188.70): E  
Ion 94.00 (93.70 to 94.70): BF1  
Ion 80.00 (79.70 to 80.70): BF1





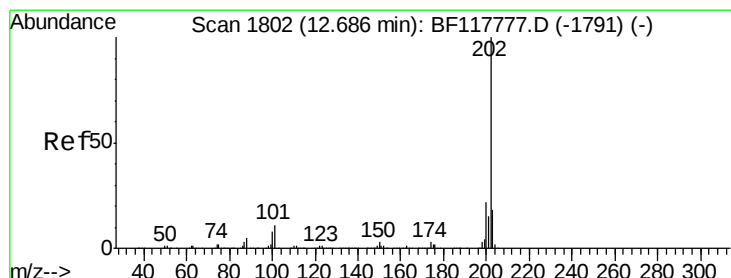
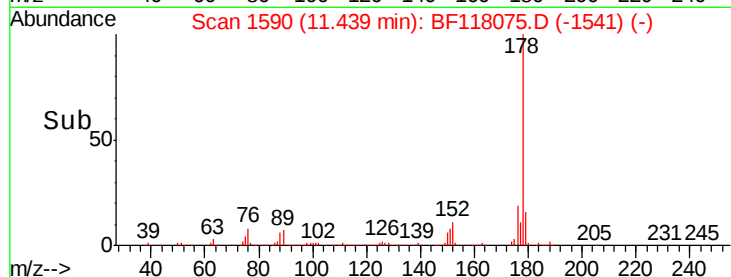
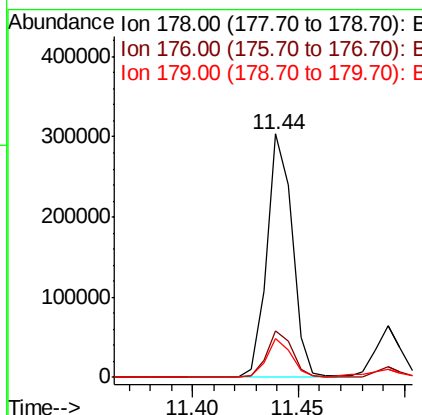
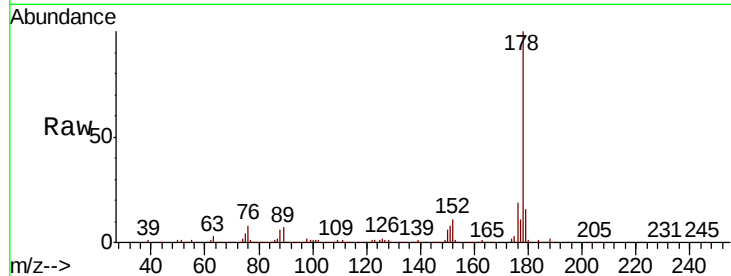
#71  
Phenanthrene  
Concen: 9.256 ng  
RT: 11.44 min Scan# 1590  
Delta R.T. -0.01 min  
Lab File: BF118075.D  
Acq: 3 Dec 2019 21:16

Instrument :  
BNA\_F  
ClientSampleId :  
B-4-(0.5-1.0)

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 176     | 19.2  | 15.4  | 23.0  |
| 179     | 15.8  | 12.3  | 18.5  |

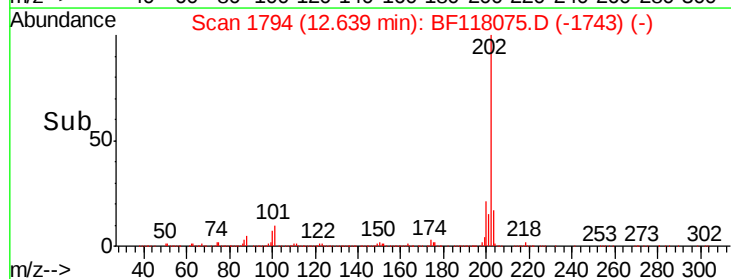
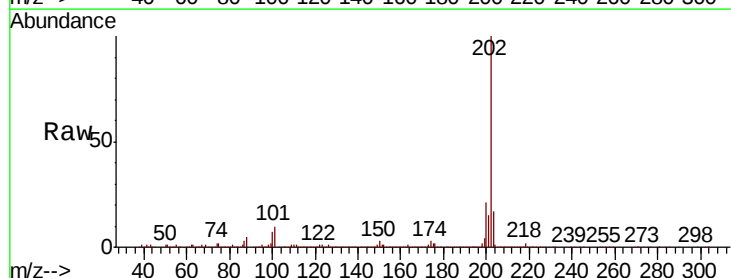
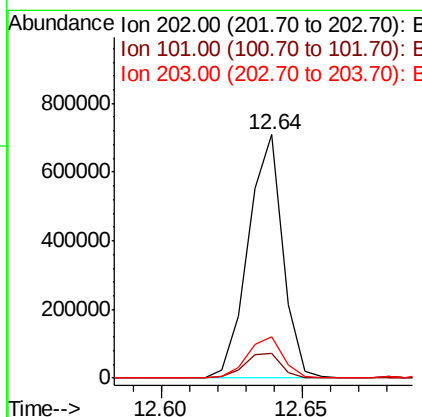
Manual Integrations  
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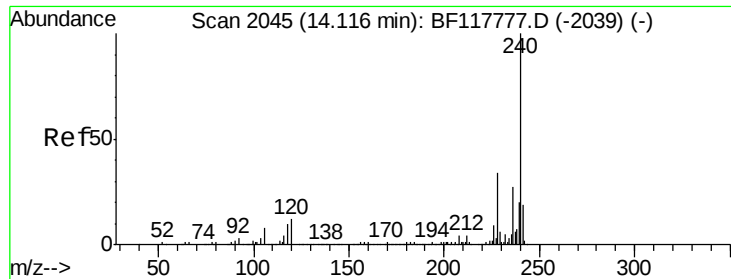
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#75  
Fluoranthene  
Concen: 19.510 ng  
RT: 12.64 min Scan# 1794  
Delta R.T. 0.00 min  
Lab File: BF118075.D  
Acq: 3 Dec 2019 21:16

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 10.1  | 0.0   | 31.5  |
| 203     | 17.1  | 0.0   | 37.6  |





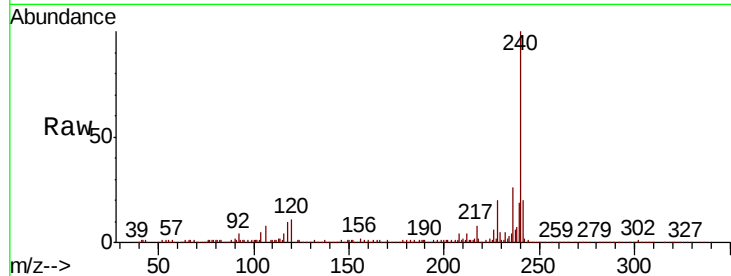
#76  
Chrysene-d12  
Concen: 20.000 ng  
RT: 14.07 min Scan# 2037  
Delta R.T. -0.01 min  
Lab File: BF118075.D  
Acq: 3 Dec 2019 21:16

Instrument :  
BNA\_F  
ClientSampleId :  
B-4-(0.5-1.0)

| Tot Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 240     | 100   |      |       |       |
| 120     | 11.1  | 8.4  | 12.6  |       |
| 236     | 25.9  | 20.6 | 31.0  |       |

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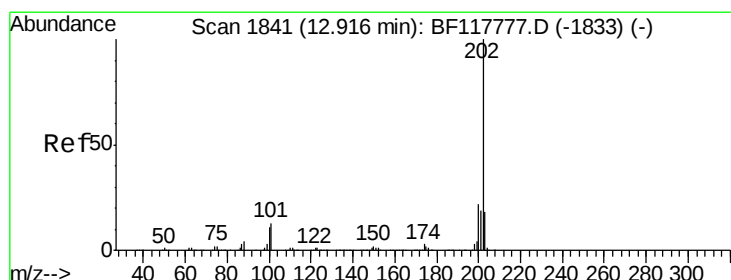
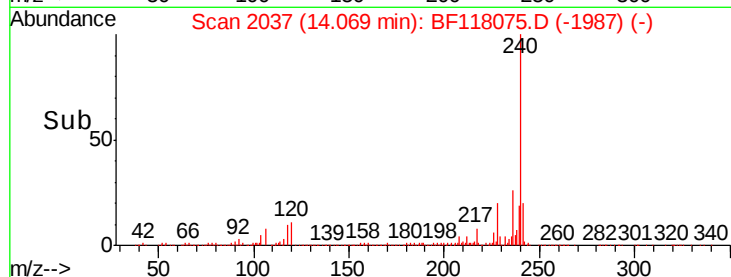
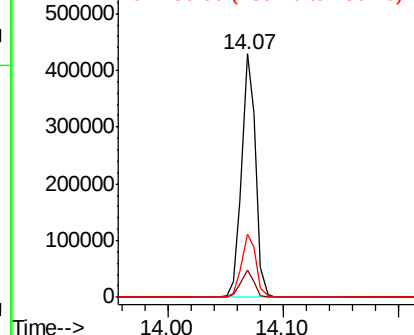


Abundance

Ion 240.00 (239.70 to 240.70): E

Ion 120.00 (119.70 to 120.70): E

Ion 236.00 (235.70 to 236.70): E



#78  
Pyrene  
Concen: 19.110 ng  
RT: 12.87 min Scan# 1833  
Delta R.T. -0.01 min  
Lab File: BF118075.D  
Acq: 3 Dec 2019 21:16

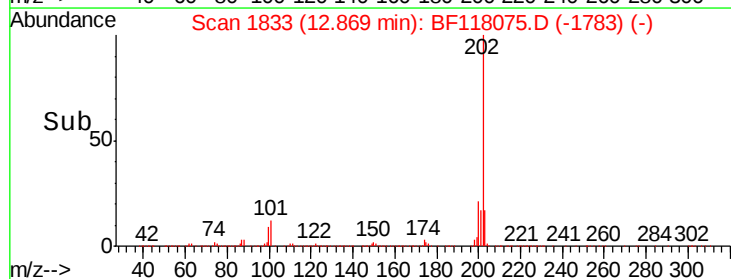
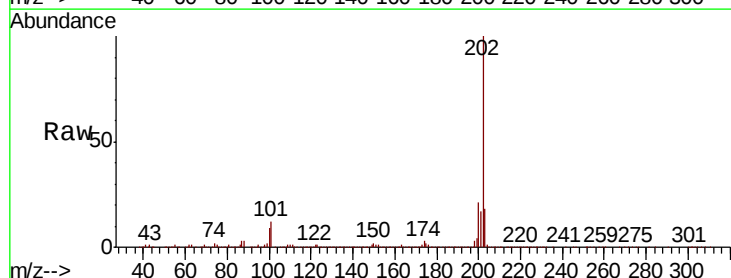
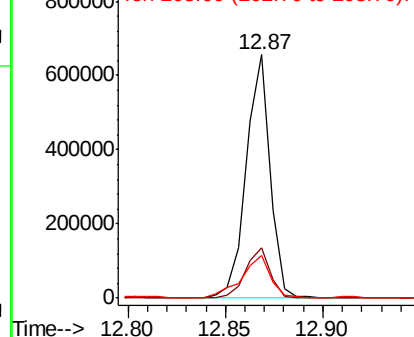
| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 202     | 100   |      |       |       |
| 200     | 20.9  | 17.0 | 25.6  |       |
| 203     | 17.6  | 14.2 | 21.4  |       |

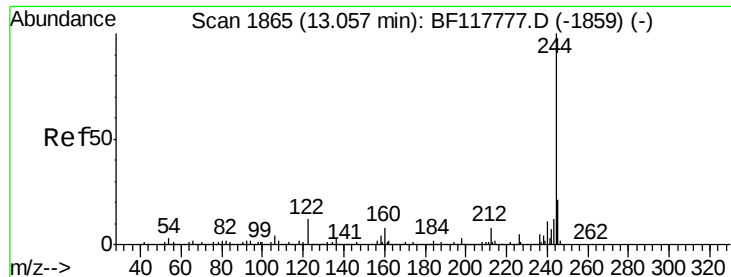
Abundance

Ion 202.00 (201.70 to 202.70): E

Ion 200.00 (199.70 to 200.70): E

Ion 203.00 (202.70 to 203.70): E





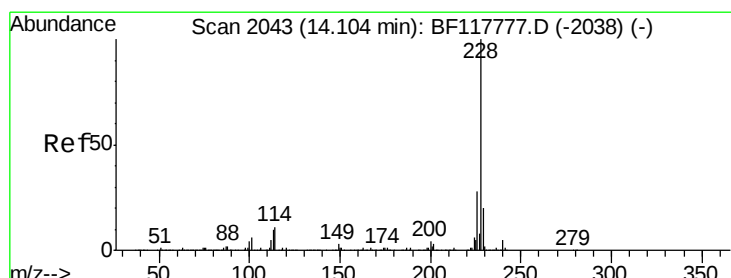
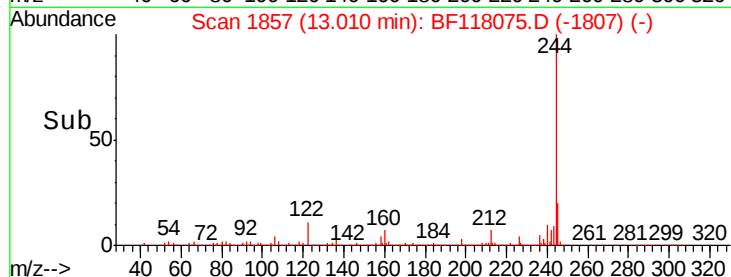
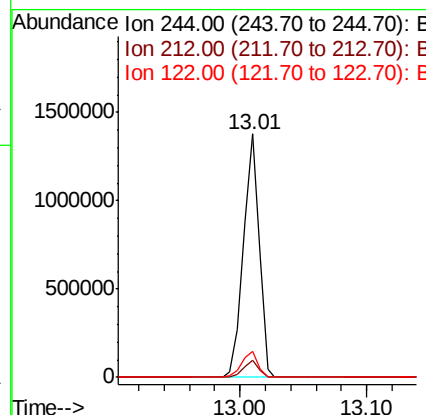
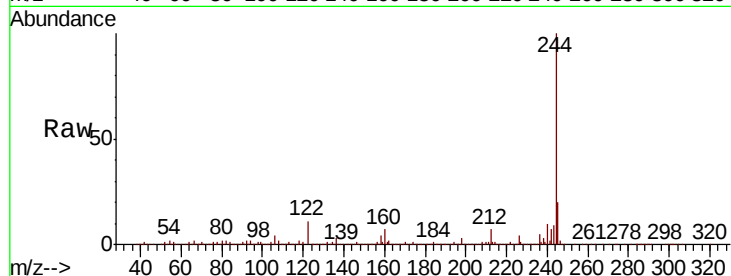
#79  
 Terphenyl-d14  
 Concen: 59.440 ng  
 RT: 13.01 min Scan# 1857  
 Delta R.T. -0.01 min  
 Lab File: BF118075.D  
 Acq: 3 Dec 2019 21:16

Instrument :  
 BNA\_F  
 ClientSampleId :  
 B-4-(0.5-1.0)

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 244     | 100   |       |       |
| 212     | 7.0   | 5.2   | 7.8   |
| 122     | 10.9  | 7.2   | 10.8  |

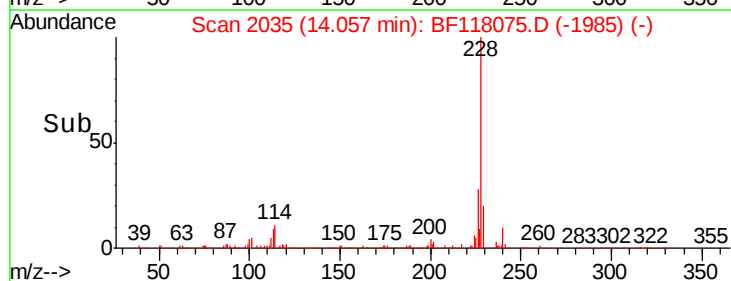
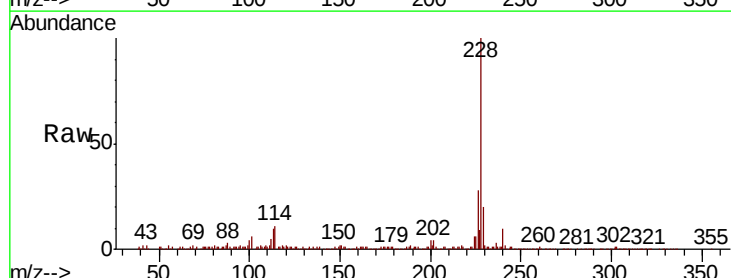
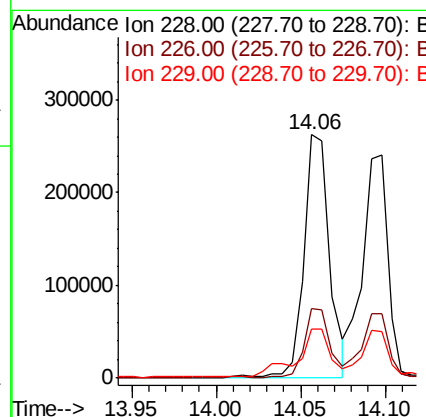
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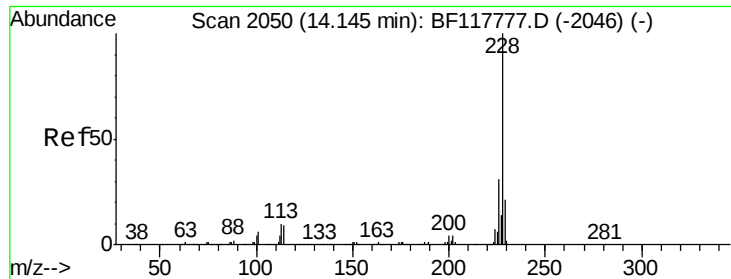
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#81  
 Benzo(a)anthracene  
 Concen: 11.638 ng  
 RT: 14.06 min Scan# 2035  
 Delta R.T. -0.01 min  
 Lab File: BF118075.D  
 Acq: 3 Dec 2019 21:16

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 28.4  | 21.9  | 32.9  |
| 229     | 20.3  | 16.2  | 24.2  |





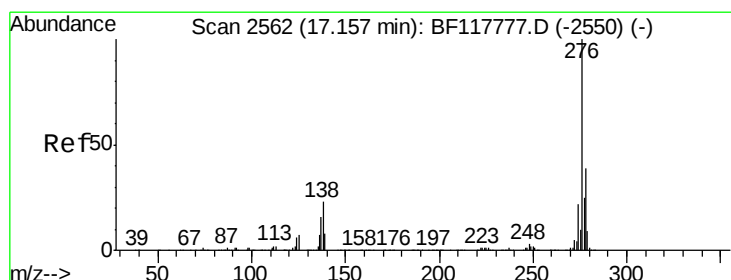
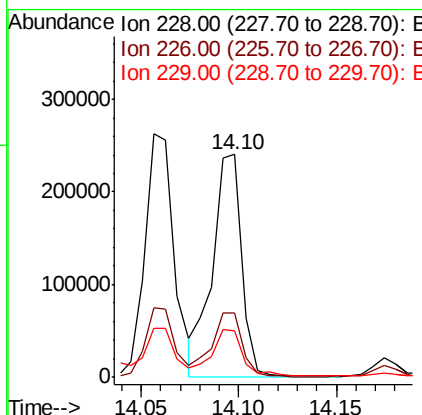
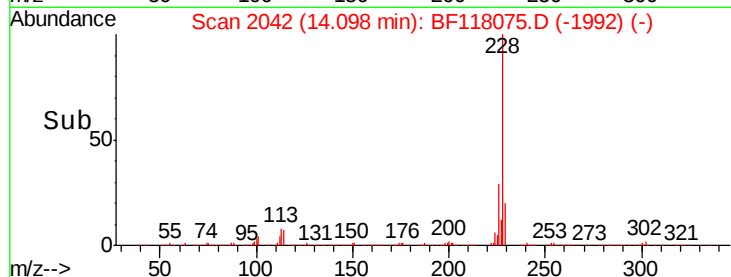
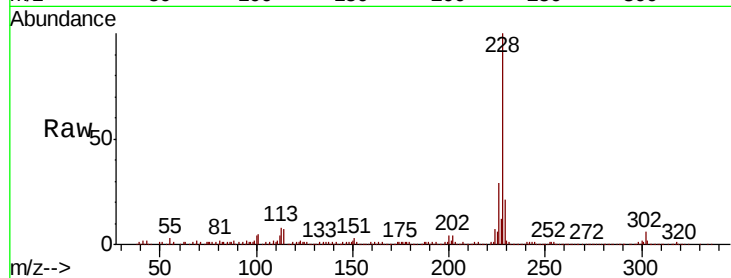
#83  
Chrysene  
Concen: 10.888 ng  
RT: 14.10 min Scan# 2042  
Delta R.T. -0.01 min  
Lab File: BF118075.D  
Acq: 3 Dec 2019 21:16

Instrument :  
BNA\_F  
ClientSampleId :  
B-4-(0.5-1.0)

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 29.1  | 23.6  | 35.4  |
| 229     | 20.6  | 16.2  | 24.2  |

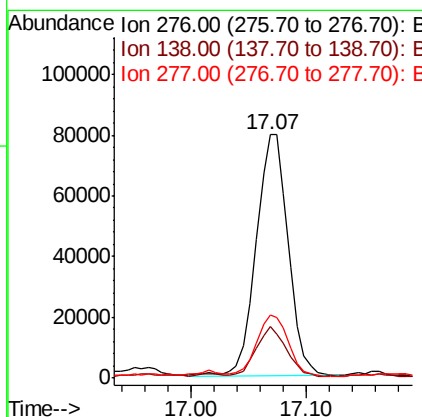
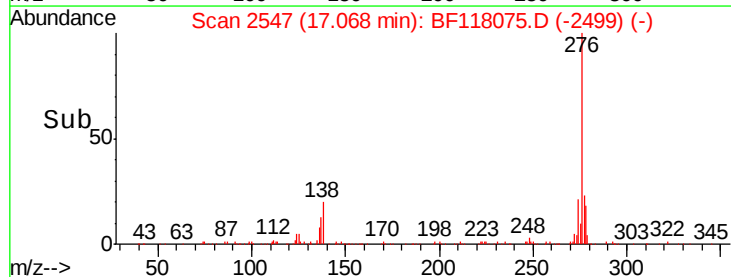
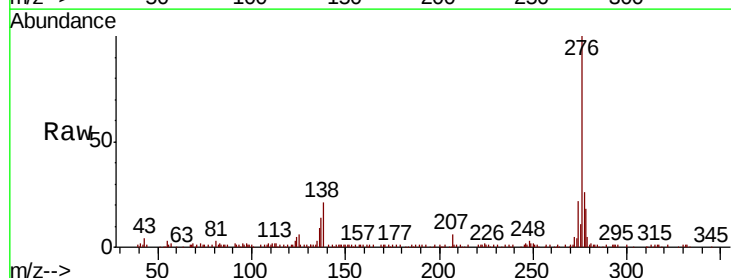
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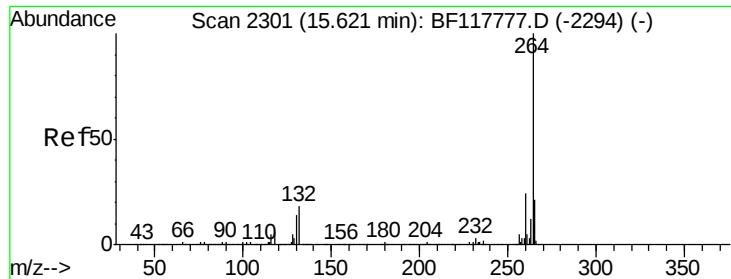
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#86  
Indeno(1,2,3-cd)pyrene  
Concen: 7.860 ng  
RT: 17.07 min Scan# 2547  
Delta R.T. -0.02 min  
Lab File: BF118075.D  
Acq: 3 Dec 2019 21:16

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 19.5  | 19.0  | 28.6  |
| 277     | 25.1  | 20.7  | 31.1  |





#87

Pervlene-d12

Concen: 20.000 ng

RT: 15.57 min Scan# 2292

Delta R.T. 0.00 min

Lab File: BF118075.D

Acq: 3 Dec 2019 21:16

Instrument :

BNA\_F

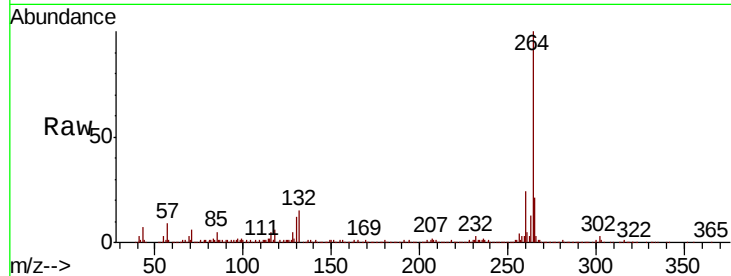
ClientSampleId :

B-4-(0.5-1.0)

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 23.6  | 19.0  | 28.6  |
| 265     | 21.4  | 16.4  | 24.6  |

Manual Integrations  
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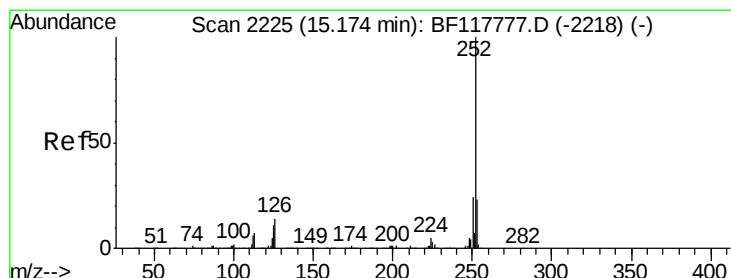
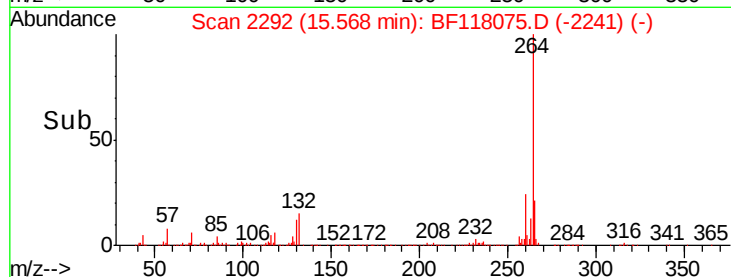
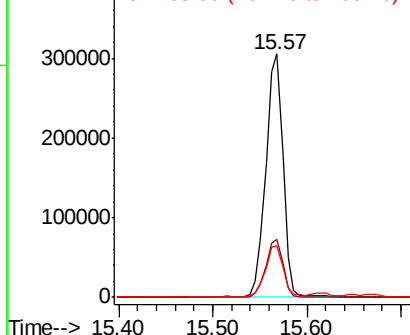


Abundance

Ion 264.00 (263.70 to 264.70): E

Ion 260.00 (259.70 to 260.70): E

Ion 265.00 (264.70 to 265.70): E



#88

Benzo(b)fluoranthene

Concen: 11.929 ng m

RT: 15.13 min Scan# 2217

Delta R.T. 0.00 min

Lab File: BF118075.D

Acq: 3 Dec 2019 21:16

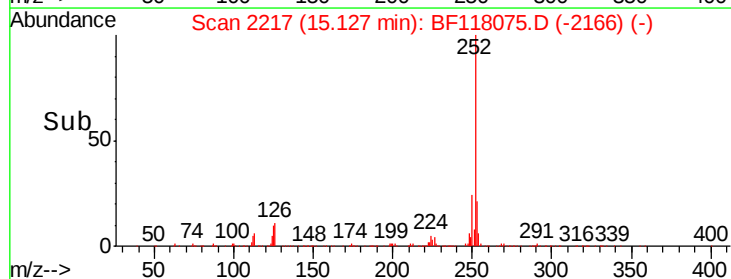
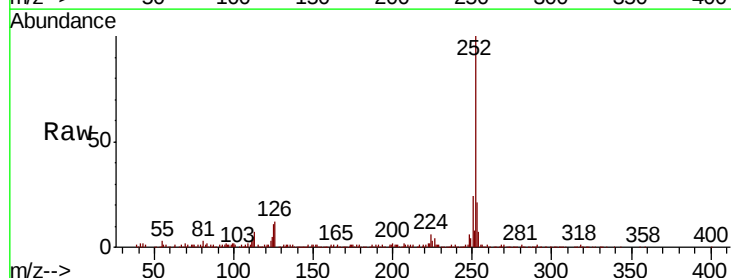
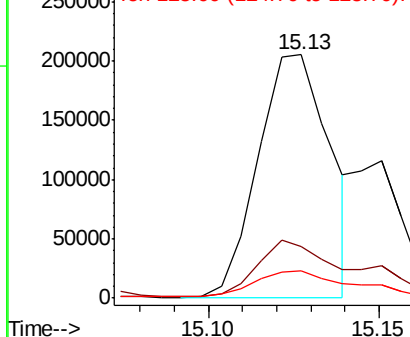
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 21.3  | 18.1  | 27.1  |
| 125     | 11.0  | 7.7   | 11.5  |

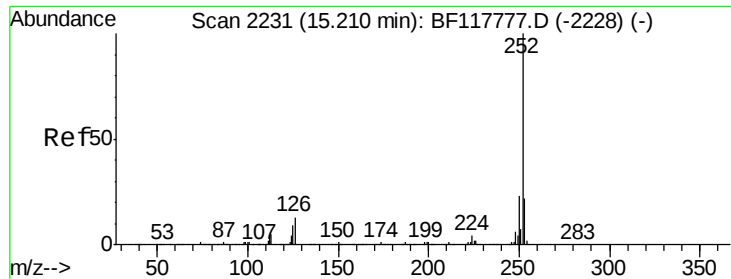
Abundance

Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E





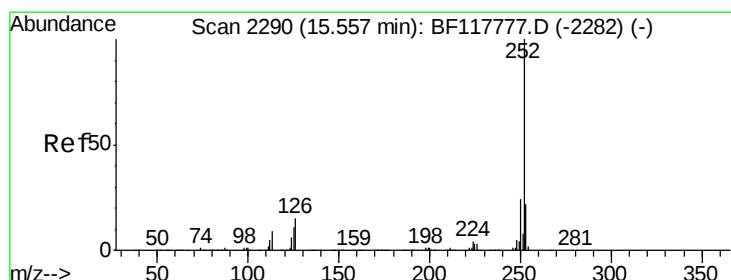
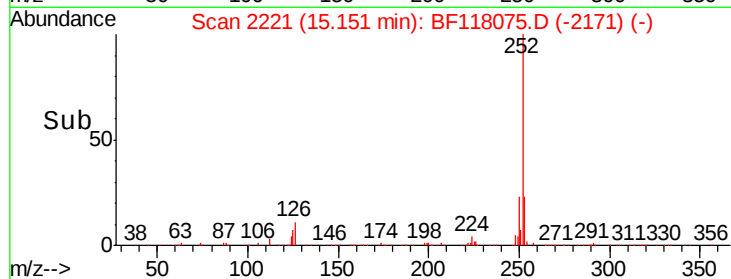
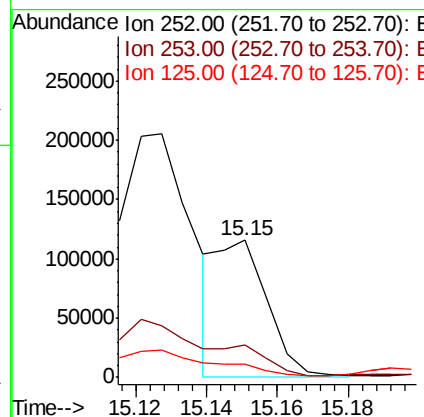
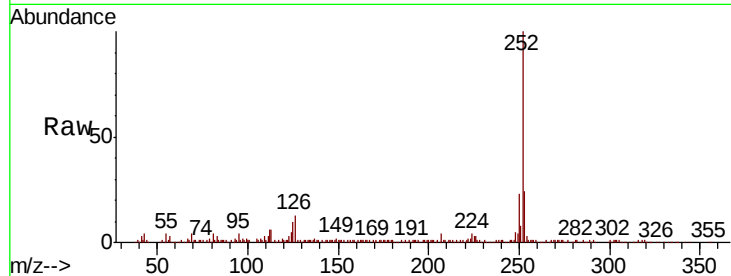
#89  
Benzo(k)fluoranthene  
Concen: 4.747 ng m  
RT: 15.15 min Scan# 2221  
Delta R.T. -0.01 min  
Lab File: BF118075.D  
Acq: 3 Dec 2019 21:16

Instrument :  
BNA\_F  
ClientSampleId :  
B-4-(0.5-1.0)

| Tot Ion | Ion  | Ratio | Resp   | Lower | Upper |
|---------|------|-------|--------|-------|-------|
| 252     | 100  |       | 113404 |       |       |
| 253     | 23.9 | 17.3  | 25.9   |       |       |
| 125     | 10.0 | 8.5   | 12.7   |       |       |

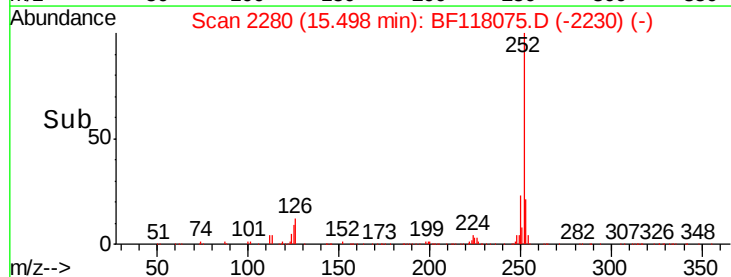
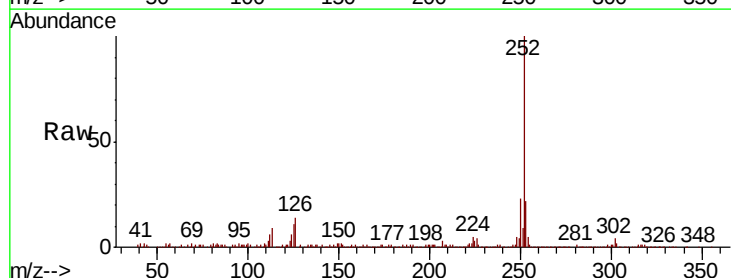
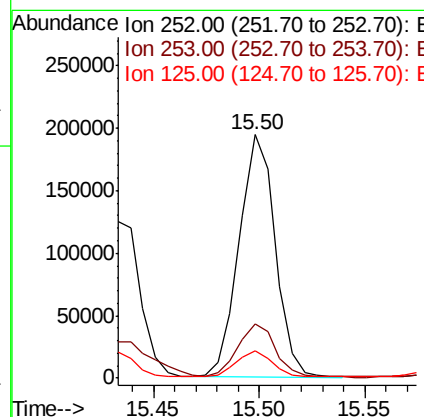
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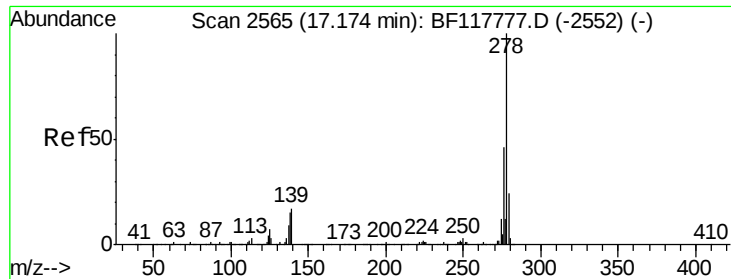
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#90  
Benzo(a)pyrene  
Concen: 10.312 ng  
RT: 15.50 min Scan# 2280  
Delta R.T. -0.01 min  
Lab File: BF118075.D  
Acq: 3 Dec 2019 21:16

| Tgt Ion | Ion  | Ratio | Resp   | Lower | Upper |
|---------|------|-------|--------|-------|-------|
| 252     | 100  |       | 229923 |       |       |
| 253     | 22.2 | 17.1  | 25.7   |       |       |
| 125     | 11.0 | 8.9   | 13.3   |       |       |





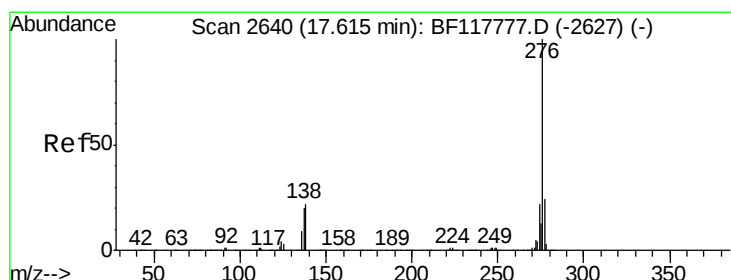
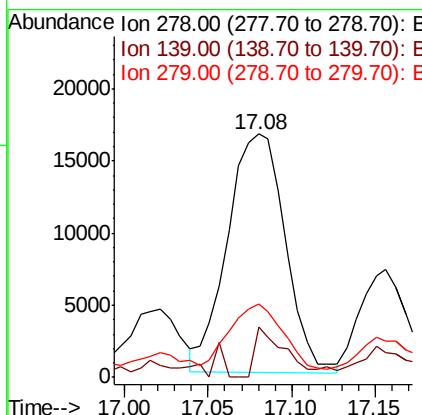
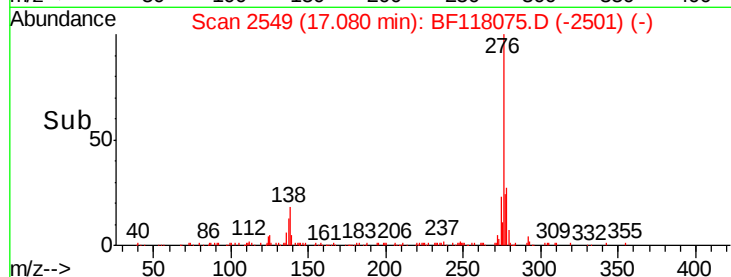
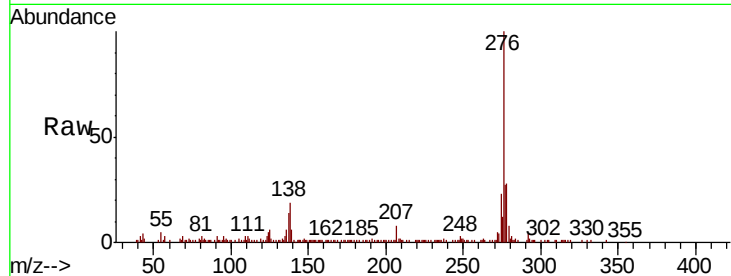
#91  
Dibenzo(a,h)anthracene  
Concen: 2.063 ng m  
RT: 17.08 min Scan# 2549  
Delta R.T. -0.02 min  
Lab File: BF118075.D  
Acq: 3 Dec 2019 21:16

Instrument :  
BNA\_F  
ClientSampleId :  
B-4-(0.5-1.0)

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 278     | 100   |       |       |
| 139     | 20.5  | 12.2  | 18.4# |
| 279     | 30.0  | 19.0  | 28.6# |

Manual Integrations  
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#92  
Benzo(g,h,i)perylene  
Concen: 7.439 ng  
RT: 17.53 min Scan# 2625  
Delta R.T. -0.01 min  
Lab File: BF118075.D  
Acq: 3 Dec 2019 21:16

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 277     | 25.0  | 19.0  | 28.4  |
| 138     | 21.1  | 16.6  | 25.0  |

